

Title (en)
Current mirror circuit.

Title (de)
Stromspiegelschaltung.

Title (fr)
Circuit miroir de courant.

Publication
EP 0067447 A2 19821222 (EN)

Application
EP 82105236 A 19820615

Priority
JP 9199281 A 19810615

Abstract (en)
A current mirror circuit in which error between input current (lin) and output current (lout) is small and which can operate with low voltage. First and second current mirror transistors (Q1, Q2) of a first conductivity type have their emitters each connected to a power supply, their bases connected together and their collectors connected to an input terminal (11) and an output terminal (12) respectively. A current amplification factor compensating third transistor (Q4) of the first conductivity type is provided which has its emitter connected to the bases of the first and second transistors and its collector connected to a reference potential point. A fourth transistor (Q3) of a second conductivity type is provided for level shifting. This transistor (Q3) has its collector connected to the emitters of the first and second transistors, its emitter connected to the base of the third transistor and its base connected to the collector of the first transistor. A current source (IS) is connected between the third transistor and the reference potential point.

IPC 1-7
G05F 3/20

IPC 8 full level
H03F 3/343 (2006.01); **G05F 3/26** (2006.01); **H03F 3/34** (2006.01)

CPC (source: EP US)
G05F 3/265 (2013.01 - EP US)

Cited by
EP0257345A3; EP0299723A3; FR2546687A1; GB2146501A; EP0376471A1; US4766367A; FR2679081A1; EP0530500A1; US5283537A; FR2547126A1; GB2142794A

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0067447 A2 19821222; EP 0067447 A3 19830119; EP 0067447 B1 19860326; CA 1172711 A 19840814; DE 3270079 D1 19860430; JP H027522 B2 19900219; JP S57206107 A 19821217; US 4462005 A 19840724

DOCDB simple family (application)
EP 82105236 A 19820615; CA 405097 A 19820614; DE 3270079 T 19820615; JP 9199281 A 19810615; US 38775082 A 19820611